

High Brightness Diffuser

ABSTRACT

5 The present invention is to provide a solution for fabricating a light
diffusing sheet- like device capable of emitting light with superior
brightness, that is a high brightness diffuser. The high brightness diffuser
mainly comprises at least two light diffusing pieces with ridge-shape
structure arranged thereon, which can be either convex or concave. The
convex ridge-shape structure is consisted of a plurality of large convex
10 ridges and a plurality of small convex ridges, which are associated with a
ridgeline existing in between two adjacent ridges where the large ridge and
small ridge are interlace-arranged, and the ridges along with the associated
ridgelines can be longitudinally extended to the same direction. Likewise,
The concave ridge-shape structure is constituted the same way as the convex
15 ridge-shape structure is, but is consisted of concave ridges. The high
brightness diffuser is fabricated by stacking up the two light diffusing pieces
and enabling an included angle to be formed between the two ridge-
extending directions of the two light diffusing pieces. Through the
embodiment of the present invention, a high brightness diffuser with
20 reduced thickness capable of emitting light of superior brightness and of
wide-angle uniformity can be fabricated, and thus can be applied in a rear
projection module.